

### **Amendments to the Specification:**

*Please amend numbered paragraph [002], as shown below:*

[002] Typically, a server is a hardware computerized-device having software with a specific purpose in a network shared by multiple users. Servers generally have pre-installed software to perform a dedicated service. For example, a Web server refers to a computer system dedicated to a Web server application. Likewise, mail servers, database servers, print servers, network access ~~server~~ servers and other similar servers exist to perform the corresponding function. A server usually requires an end user to ship the hardware back to the manufacturer ~~in-order~~ to fundamentally change the purpose of a server. The manufacturer would then use a coded key, such as a digital signature, to burn a new digital image into the server hardware in order to change the purpose of a server, for example, ~~[[as]]~~ from a mail server to a print server. Accordingly, a server manufacturer typically installs a digital image onto the server prior to sending the server to the user. A digital image is usually a file in a compressed file format that contains an exact replica of the applications, operating system, and configuration settings of a fully operational source computerized device at the time when the digital image was created.

*Please amend numbered paragraph [003], as shown below:*

[003] Integration of a server farm deployment has typically required manual coordination of the protocol for network monitoring and control, such as Simple Network Management Protocol (SNMP), the protocol to build images for servers in the server farm, the deployment protocol, and the components within the network. A user, such as a system administrator, configures servers having pre-installed digital images to operate with the network protocols and monitoring and control protocols. After the digital images and software ~~[[has]]~~ have been installed ~~[[then]]~~, the user configures each component in the network to have links to each other ~~in-order~~ to work as a clustered group. As a last step, the user then typically utilizes a deployment protocol to create an operational server farm. A server farm typically refers to a cluster of servers and other networked components that work together as a group. The server farm components are linked together ~~in-order~~ to handle variable workloads, communicate with

each other, and/or to provide continued operation in the event one component fails. Protocols such as SNMP generally have no protocol to build digital images for servers as well as no deployment protocol to strategically arrange the networked components in an operational topology.

*Please amend paragraph [005], as shown below:*

[005]       The drawings refer to the invention in which:

~~figure~~ Figure 1 illustrates an embodiment of a system to configure, build, and deploy a dynamic digital image for one or more components in a network after receiving a design; [[and]]

~~figure~~ Figure 2 illustrates an embodiment of a master configurer having logic to configure settings in a digital image for a target server, build the digital image, and deploy the digital image onto that target server; and

Figure 3 illustrates a method to configure a digital image for a target server, build the digital image, and deploy the digital image to the target server.

*Please amend paragraph [007], as shown below:*

[007]       In the following description, numerous specific details are set forth, such as examples of specific data signals, named components, connections, number of memory columns in a group of memory columns, etc., in order to provide a thorough understanding of the present invention. It will be apparent, however, to one skilled in the art that the present invention may be practiced without these specific details. In other instances, well known components or methods have not been described in detail but rather in a block diagram in order to avoid unnecessarily obscuring the present invention. Thus, the specific details set forth are merely exemplary. The specific details may be varied from and still be contemplated to be within the spirit and scope of the present invention. ~~The term coupled is defined as meaning connected either directly or indirectly through another optic component.~~

*Please amend paragraph [0010], as shown below:*

[0010] A user may submit a first network design 112 to the master configurer 102. Alternatively, the user may use a wizard program having graphic user interface 228 that resides on the master configurer 102 to create the network design. Either way, the master configurer 102 receives the first network design 112. The master configurer 102 ~~knowing~~ uses the design of the network, ~~configures to configure~~ the digital images of each network component to include the unique operational network settings for that network. The network settings may include the IP address assigned to various components in the network, port and socket settings, as well as other similar variables. The master configurer 102 then builds a digital image for one or more components in the network ~~in-order~~ to create the designed network. In an embodiment, the master configurer 102 dynamically builds the digital images because the building operations are performed "on the fly" in the master configurer 102 to incorporate the operational network configuration settings rather than a digital image made beforehand during the manufacturing process.

*Please amend numbered paragraph [0012], as shown below:*

[0012] The master configurer 102 may be a central server that contains various logic blocks. A logic block may be logic designed to accomplish a specific function consisting of electronic circuits that follow the rules of Boolean Logic, software that contain patterns of instructions, or a combination of both. The logic allows the integration of a network of addressable components ~~that are addressable~~ to be designed, ~~[[map]]~~ mapped out with the desired network topology, and deployed from the master configurer 102. Thus, the master configurer 102 may assist in the design, address configuration, links configuration, and deployment of a digital image on individual servers in a server farm.

*Please amend numbered paragraph [0013], as shown below:*

[0013] The logic identifies each component in the network through user input, detection, or ~~component initiated~~ a component-initiated request for identification. A user may supply the amount and types of hardware components available in the network making up the server farm. The logic may generate a snoop signal to detect what type of device, such as a server or a router 104, exists on a given IP address. Additionally, the master configurer 102 may receive a remote boot signal from each server in the network that identifies that network component as a server.

*Please amend numbered paragraph [0016], as shown below:*

[0016] For example, the first network design 112 may cause the master configurer 102 to build, ~~configure~~ configure, and deploy a network having a firewall server, a web ~~server~~ server, and an email server all routed by the router 104 to the same domain name. The master configurer 102 may import from a database a generic digital image containing all ~~[[for]]~~ of the necessary software to create a functional firewall server. Next, the master configurer 102 may consult a design rule logic block 220 to determine that the firewall server should be layered as the first device to receive incoming data packets. A firewall server typically contains anti-virus and security software to protect the inner network components from a hacker or virus threat external to the local network. The master configurer 102 then configures the digital image for the firewall server to be aware of the other two servers in the network and the router 104 in the network. The master configurer 102 then configures links into the digital images for the firewall server between the firewall server and the router 104, ~~[[and]]~~ between the firewall server and the web server, as well as between the firewall server and the e-mail server.

*Please amend numbered paragraph [0022], as shown below:*

[0022] Data packets identify ~~different programs~~ a target program operating on the server with which to communicate ~~[[with]]~~ by its socket. A socket is a combination of (1) the server's IP address and (2) the program's port. If the data packet does not know the IP address, but knows the server by name, the data packet uses a Domain Name System server (DNS server) in the

configuration logic block to turn the name into the IP address. The port may be a logical number assigned to every application. For FTP, SMTP, HTTP and other common applications, there are agreed-upon numbers known as "well-known ports." For example, HTTP applications (World Wide Web) are on port 80, so a web server is located by its IP address and port 80.

*Please amend numbered paragraph [0024], as shown below:*

[0024] A wizard program may guide a user through a graphic user interface 228 to generate a network topology for the new network. Network topology is the pattern of interconnection between nodes (network components); for example, a bus ~~[[shape]] configuration~~, ring ~~[[shape]] configuration~~, or star configuration. The user may provide a design list of functions that the server farm should perform, the amount and type of hardware components that populate the network, and the number of WAN IP addresses assigned to the network. The graphic user interface 228 may forward the information to the network topology logic block 226. The network topology block 226 then uses an algorithm to determine the type or types of network topologies needed to meet the design list requirements submitted by the user. The network topology block 226 then imports various network topologies from the database that meet the design list requirement. The graphic user interface 228 illustrates these network topology options to the user and allows the user to choose one of the network topologies to deploy.

*Please amend numbered paragraph [0034], as shown below:*

[0034] In one embodiment, portions of the logic may be application software, operating software, and other types of digital instructions embodied onto a machine-readable medium. A machine-readable medium includes any mechanism that provides (e.g., stores ~~and/or transmits~~) information in a form readable by a machine (e.g., a computer). For example, a machine-readable medium includes read only memory (ROM); random access memory (RAM); magnetic disk storage media; optical storage media; flash memory devices; DVD's, ~~electrical, optical, acoustical~~ ~~or other form of propagated signals (e.g., carrier waves, infrared signals, digital signals)~~, EPROMs, EEPROMs, FLASH, magnetic or optical cards, or any type of media suitable for

storing electronic instructions. Slower ~~mediums~~ media could be cached to a faster, more practical, medium.